

CLAIMS

1-6. (canceled)

7. (presently amended) ~~An object as set forth in Claim 5;~~ An object operable for communicating wireless radio frequency (RF) signals,

said object comprising an antenna integrated (for example, embedded) therewith,

said object comprising a product (e.g. stent) and an RFID tag attached thereto (e.g. integrated therewith),

said RFID tag comprising a transmitter and a (preferably much smaller than the integrated antenna) tag antenna operable to transmit wireless RF signals to said integrated antenna,

said RFID tag being passive and further comprising

a receiver,

a microprocessor,

a data storage device operable to store a selected code (e.g. an ID code to identify said object or said product),

said tag antenna being operable to receive incoming wireless RF signals from said integrated antenna and to communicate them to said receiver,

said receiver being operable to communicate them to said microprocessor,

said microprocessor being operable to read said selected code (e.g. said ID code) from said data storage device in response to a selected set of said incoming wireless RF signals and to transmit said selected

code wirelessly from said tag antenna to said integrated antenna,

said integrated antenna being operable thereupon to transmit said ID code wirelessly to a field antenna.

8-30. (canceled)

31. (presently amended) ~~A receptacle as set forth in Claim 30,~~

A receptacle comprising:

a body portion operable to hold a product,

an RFID tag attached to said body portion, said RFID tag comprising

a receiver,

a transmitter, and

an antenna,

said antenna being integrated into a unitary relationship with said body portion,

said RFID tag being operable to receive and transmit wirelessly at a frequency not exceeding 1 megahertz,

said frequency not exceeding 300 kilohertz,

said receptacle further comprising an indicator element operable for indicating a condition selected from a) impending expiry of viability of said product and b) sealing of said receptacle;

said receptacle comprising a sensor disposed on a surface of said receptacle and operable to

generate a sealing signal indicating sealing of said receptacle upon shrink-wrapping thereof.

32. (presently amended) ~~A receptacle as set forth in Claim 22,~~

A receptacle comprising:

a body portion operable to hold a product,

an RFID tag attached to said body portion, said RFID tag comprising

a receiver,

a transmitter, and

an antenna,

said antenna being integrated into a unitary relationship with said body portion,

said RFID tag being operable to receive and transmit wirelessly at a frequency not exceeding 1 megahertz,

said frequency not exceeding 300 kilohertz,

said receptacle comprising a container operable to enclose said product,

said container further comprising a sensor disposed on a surface of said container and operable to generate a sealing signal indicating sealing of said container upon shrink-wrapping thereof;

said receptacle comprising a stackable container which is adapted for stacking upon other stackable containers to expose a surface of said stackable container for visual inspection,

said stackable container further comprising an indicator element disposed on said surface and operable for indicating a condition selected from

- a) temperature of said product,
- b) sealing of said receptacle,
- c) light exposure within said stackable container,
- d) weight of said product,
- e) humidity within said stackable container,
- f) jog/shock imposed on said container, and
- g) impending expiry of viability of said product.

33. (original) A receptacle as set forth in Claim 32, said indicator element being operable to provide a signal selected from visible light and audible sound.

34. (original) A receptacle as set forth in Claim 33, said indicator element being an LCD display.

35. (original) A receptacle as set forth in Claim 33, said indicator element being a blinking lamp.

36-40. (canceled)

41. (original) A method of tracking the conditions of products, each said condition being selected from temperature, product enclosure (shrink-wrapping), light level, product weight, humidity, jog, product age/expiry, and product location (GPS coordinates), said method comprising the steps of :

- a) integrating a passive RFID tag with a product, said passive RFID tag comprising a product antenna integrated into said product, said RFID tag being operable to emit wireless RF

identification (ID) signals operable to identify said product in response to a wireless RF interrogation signal;

b) placing said product onto a first receptacle, said first receptacle being provided with a sensor for a said condition and an active RFID tag operable to emit said RF interrogation signal, to receive said ID signals, and to emit first RF signals operable to identify said product and to indicate a said condition at said first receptacle,

c) placing said first receptacle into a second receptacle, said second receptacle being provided with a sensor for a said condition and an active RFID tag operable to receive said first signals and to emit second RF signals that indicate a said condition at one of said first and second receptacles,

d) detecting audible signals selected from said first RF signals and said second RF signals

e) transmitting audible signals (e.g. by cable or by high frequency RF) detected at step (d) to a central station for audible recording thereat (e.g. on a write-once-only CD).

42. (presently amended) A method as set forth in Claim 41, and further comprising the step of :

⇒ f) providing a visual (e.g. on an LCD display) or audible (e.g. an alarm bell) indication of a said condition.

43. (original) A method as set forth in Claim 41, said first receptacle comprising a first antenna integrated therewith.

44. (original) A method as set forth in Claim 43, said second receptacle comprising a second antenna integrated therewith.

45. (presently amended) A method as set forth in ~~Claim 37 or~~ Claim 41, said RF signals having a frequency not exceeding 1 megahertz.

46. (original) A system of tracking the conditions of products, each said condition being selected from temperature, product enclosure (shrink-wrapping), light level, product weight, humidity, jog, product age/expiry, and product location (GPS coordinates), said system comprising:

- a) a passive RFID tag integrated with a said product, said passive RFID tag comprising a product antenna integrated into said product, said RFID tag being operable to emit wireless RF identification (ID) signals operable to identify said product in response to a wireless RF interrogation signal;
- b) a first receptacle operable to hold said product, said first receptacle being provided with a sensor for a said condition and an active RFID tag operable to emit said RF interrogation signal, to receive said ID signals, and to emit first RF signals operable to identify said product and to indicate a said condition at said first receptacle,
- c) a second receptacle operable to hold said first receptacle, said second receptacle being provided with a sensor for a said condition and an active RFID tag operable to receive said first signals and to emit second RF signals that indicate a said condition at one of said first and second receptacles,
- d) a field antenna operable to detect auditable signals selected from said first RF signals and said second RF signals
- e) a transmitter operable to transmit auditable signals (e.g. by cable or by high frequency RF) detected at step (d) to a central station (e.g. via a satellite) for auditable recording thereat (e.g. on a write-once-only CD).

47. (presently amended) A ~~system method~~ as set forth in Claim 46, said system further comprising:

- ⇒ f) an indicator operable to providing a visual (e.g. on an LCD display) or audible (e.g. an alarm bell) indication of a said condition.

48. (original) A method as set forth in Claim 46, said first receptacle comprising a first antenna integrated therewith.

49. (original) A system as set forth in Claim 48, said second receptacle comprising a second antenna integrated therewith.

50. (original) A system as set forth in Claim 49, said RF signals having a frequency not exceeding 15 megahertz.

51. (original) A system as set forth in Claim 49, said first receptacle comprising a stackable box, said second receptacle being selected from a pallet, a ULD Unit Load Device), and a warehouse shelving unit.